SCIENCE & EDUCATION
Impact
Benefits from USDA/Land-Grant Partnership

What's It Worth?

Helping farmers increase the value of their products.

Economic and environmental challenges threaten farmers' ability to sustain their operations. Increased exports from abroad, narrowing profit margins, urbanization of farmland, waste management problems, and concerns about uncertain markets are among the many challenges. The USDA and land-grant universities strive to confront these challenges and create solutions that have the added advantage of benefiting the environment.

Payoff

- **Programming profits.** Raising the value of livestock and crops helps keep farmers and ranchers in business. Along with USDA, **Colorado State** Extension developed a program to help farmers and ranchers adopt sustainable crop and livestock practices. Increases in total crop yield and profits added $15 million yearly to Colorado's economy. **Montana State** Extension partnered with the Montana Stockgrowers Association to help more than 1,000 ranchers to certify an average of 80 calves each, through the voluntary Beef Quality Assurance program. BQA-certified calves sold for $9 to $18 per head more than uncertified calves, totaling $960,000 in increased revenue. To help keep shepherds from leaving the business, **West Virginia** Extension concentrates on helping shepherds market and manage their flocks. All 1,100 West Virginia shepherds have participated in at least three Extension programs that helped them earn $278,000 by helping protect lambs from predators, improving internal parasite management, pooling their wool for market, and using direct marketing for lambs and kids.

- **Enhancing harvests.** In Alabama**,** farmers plant 195,000 acres of peanuts each year. **Alabama** Extension developed a new pod-blasting method that shows the best time for peanut harvesting. In one county alone, this has increased profits for more than 300 growers by $3.75 million during the past five years. Working with a local pine straw company, **Georgia** Extension designed a sprayer that could spray forest plots that are mostly inaccessible to standard spray equipment because of the close spacing of pine trees. Not damaging the trees increases the value of pine straw production by $140 per acre for a first-year revenue increase of $336,000 in a single county.

RESEARCH, EXTENSION AND EDUCATION AT WORK

Science & Education Impact

Benefits from USDA/Land-Grant Partnership

- **Hot tips.** Advisory groups give more than advice: they help solve problems. Michigan's asparagus market hit bottom in 2000 when low-priced South American asparagus flooded processors. **Michigan State** research and Extension partnered with the Michigan Asparagus Advisory Board to form Michigan Asparagus Growers. In 2004, this cooperative's sales topped 1.1 million pounds, nearly half of the total fresh market in Michigan.

- **Mayhaw markets.** Research is not always theoretical. **Louisiana State** developed new varieties of the mayhaw tree native to Louisiana and other southeastern states and known for the delicious jellies of its crabapple-like fruit. Why the new varieties? Many native stands had been cleared for agriculture and demand for its fruit exceeded the mayhaw supply. With the new varieties and greatly expanded orchard acreage, the farm-gate value of Louisiana mayhaw production has grown from less than $200 in 1992 to $123,678 in 2004. The market value for orchard mayhaw products is now more than $500,000.

- **Pig profits.** While conducting trials to determine the effects of weaning age on pig performance, **Kansas State** researchers found that despite a trend toward early weaning, for every day the age at weaning is increased, the improvements in growth rate and feed efficiency result in a profit of 94 cents per pig. For a swine producer with 500 sows, increasing the weaning age by two days would generate $20,000 of added income.

- **Waste not. Penn State's** Organic Materials Processing and Education Center now handles food and paper waste from more than 2.3 million patrons in seven dining commons, two campus hotels, the PSU student union, and a campus day care center along with landscaping debris, dairy manure, and other agricultural wastes. During 2003-2004, the facility processed more than 2,100 tons of materials. In 2004, the university recycled or reused 38 percent of the waste generated on campus. Outreach activities teach farmers and others the value of composting learned in the project.

- **Old land, new uses.** New crops and land uses keep farms and ranches vital. **Nebraska** research and Extension helped find promising alternative crops for the Nebraska panhandle. Birdseed crops now grow on 250,000 panhandle acres and produce $20 million a year. Panhandle growers produce 1,500 acres of grass seed, valued at $1 million annually, too. **Texas** Extension found two varieties of cotton from Australia that produced higher-quality cotton under Texas growing conditions. The varieties accounted for 45 percent of Texas cotton planting in 2004, with an estimated direct economic impact of $82.7 million, including an estimated 700 jobs in agriculture and related industries. **Utah State** Extension has helped landowners develop wildlife-related recreational opportunities. More than one-third of Utah's 1.5 million acres of privately owned rangeland is enrolled in the Cooperative Wildlife Management Program. The program provides more than 2,000 hunters access to high-quality hunting experiences and generates more than $10 million in new agricultural revenues, keeping many ranchers from having to sell off land to stay viable.

Cooperative State Research, Education, and Extension Service
United States Department of Agriculture

Cooperative State Research, Education, and Extension Service in cooperation with the Extension Committee on Organization and Policy, the Experiment Station Committee on Organization and Policy, the Academic Programs Committee on Organization and Policy, the International Programs Committee on Organization and Policy, and the Louisiana State University Agricultural Center.

April 2005